

Title (en)
METHODS CIRCUITS DEVICES ASSEMBLIES AND SYSTEMS FOR PROVIDING AN ACTIVE ANTENNA

Title (de)
VERFAHREN, SCHALTVORRICHTUNGSANORDNUNGEN UND SYSTEME ZUR BEREITSTELLUNG EINER AKTIVEN ANTENNE

Title (fr)
PROCÉDÉS, CIRCUITS, DISPOSITIFS, ENSEMBLES ET SYSTÈMES POUR FOURNIR UNE ANTENNE ACTIVE

Publication
EP 3520174 C0 20230802 (EN)

Application
EP 17855139 A 20170929

Priority
• US 201662401211 P 20160929
• IB 2017056016 W 20170929

Abstract (en)
[origin: WO2018060950A1] Disclosed herein are methods, circuits, devices, assemblies and systems for facilitating wireless communication, both satellite and terrestrial. According to embodiments, there may be provided a integrated bidirectional phased array including multiple antenna element clusters, wherein each antenna cluster may be comprised of a set of antenna elements disposed in proximity to one another and connected to one another through an intra-cluster signal distribution line. Antenna element clusters may be connected to one another and to a main signal line through a network of inter-cluster signal distribution lines as least some of which may include electrically controllable signal phase shifters. A first set of antenna element clusters may be connected to a transmission signal (TX) line, thereby forming a TX antenna. A second set of antenna element clusters may be connected to a receive signal (RX) line, thereby forming a second RX antenna. Antenna elements of RX and TX antenna element clusters may disposed on a common surface, or parallel surfaces, in an interlaced manner.

IPC 8 full level
H01Q 21/06 (2006.01); **H01Q 3/34** (2006.01); **H01Q 9/04** (2006.01); **H01Q 21/00** (2006.01); **H01Q 3/06** (2006.01)

CPC (source: EP US)
H01Q 3/34 (2013.01 - EP US); **H01Q 9/0414** (2013.01 - EP); **H01Q 9/0435** (2013.01 - EP); **H01Q 9/0464** (2013.01 - EP);
H01Q 21/0075 (2013.01 - EP); **H01Q 21/065** (2013.01 - EP); **H01Q 21/08** (2013.01 - US); **H04B 1/38** (2013.01 - US); **H01Q 3/06** (2013.01 - EP)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Participating member state (EPC – UP)
AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)
WO 2018060950 A1 20180405; EP 3520174 A1 20190807; EP 3520174 A4 20200617; EP 3520174 B1 20230802; EP 3520174 C0 20230802;
US 10854969 B2 20201201; US 11387554 B2 20220712; US 2020091604 A1 20200319; US 2021057814 A1 20210225

DOCDB simple family (application)
IB 2017056016 W 20170929; EP 17855139 A 20170929; US 201715764410 A 20170929; US 202017092273 A 20201108